Feb. 20, 1934. J. E. JOHNSON 1,948,383

WINDOW SCREEN FRAME

Filed March 3, 1932

Fig. 1.

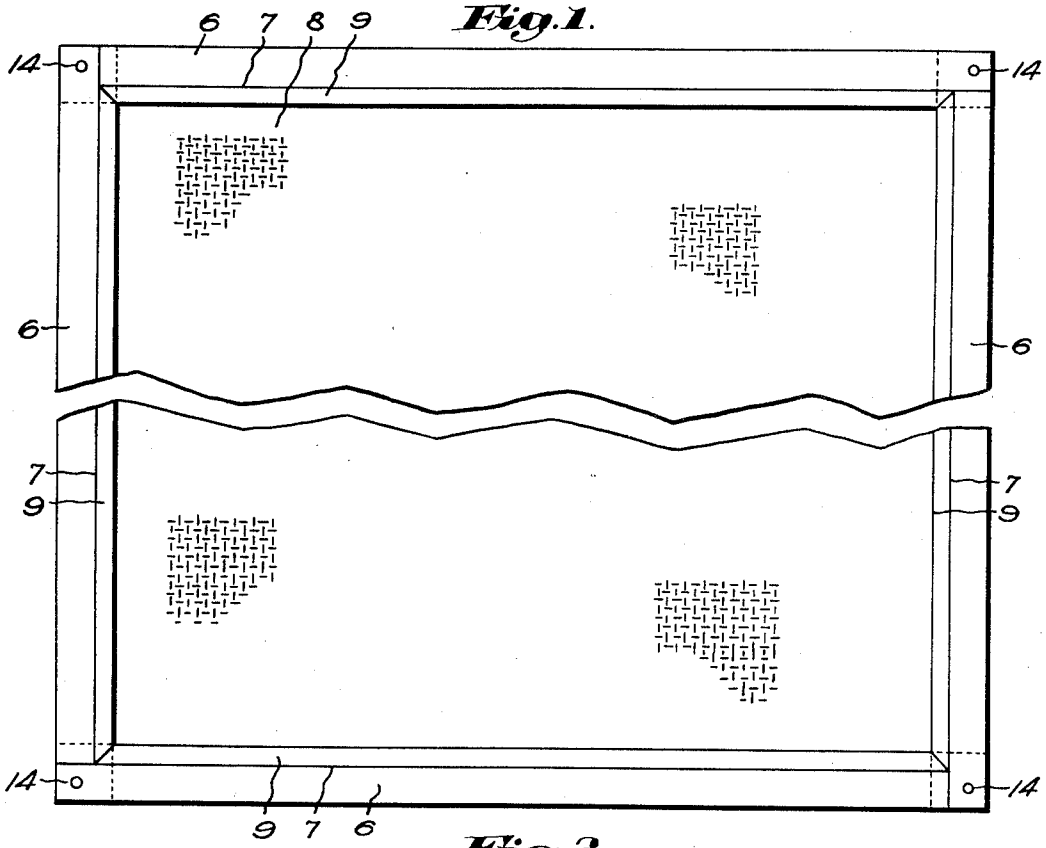


Fig. 2.



Fig. 3.



Fig. 4

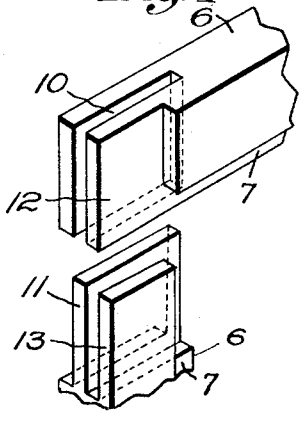
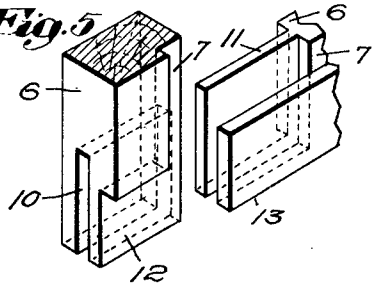


Fig. 5



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WINDOW SCREEN FRAME

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3 Claims. (Cl. 156—14)

This invention relates to rectangular, corner-jointed, wood frames, and is capable of general application to wood structures, although it is particularly intended for use as a window-screen frame. The invention aims to provide a frame all four members of which shall be alike in respect to the formation of corresponding ends, so that the manufacture and assembling of the members shall be more rapid and convenient, as compared with former frames and methods of manufacture, especially in respect to the assembling and setting of the cutters of the machine which cuts the ends to be joined together in assembling the frame.

The invention will best be understood by reference to the following description, when taken in connection with the accompanying drawing of one specific embodiment thereof, while its scope will be pointed out more particularly in the appended claims.

In the drawing:

Fig. 1 is an elevation of a window-screen having a frame embodying the invention;

Fig. 2 is a plan of one of the four like members, the one shown being that which is at the top in Fig. 1;

Fig. 3 is a front elevation of the same;

Fig. 4 is a perspective view of one of the four like corners separated, the one shown being the upper left-hand corner considered in respect to Fig. 1; and

Fig. 5 is a perspective view of another of the four like corners separated, the one shown being the lower left-hand corner considered in respect to Fig. 1.

Referring to the drawing, and to the embodiment of the invention illustrated therein, there is shown a window-screen having a frame comprising four members 6, all of which are alike in respect to the formation of their ends where they are joined together; in fact, all four members may be said to be identical, except perhaps in length, it being understood of course that if the frame should happen to be square, all four members will be precisely alike, even as to length. Each of the four members is provided with rabbets or channels 7, to receive the margin of wire screen cloth 8, which is held in place by strips 9 mitred together at the corners.

Considering one of the four identical corners, and referring to the upper left-hand corner in respect to Fig. 1, the upper horizontal member 6 is cut to present an open mortise 10, which receives a tenon 11 of the left-hand vertical member, and the upper horizontal member is cut to provide a recess or channel 12, which receives a tenon or tongue 13 of the left-hand vertical member. In like manner, the lower end of the left-hand vertical member (see Fig. 5) is cut to provide an open mortise 10 to receive a tenon 11 of the lower horizontal member, and the lower end of the left-hand vertical member 6 is cut to present a recess or channel 12 to receive a tenon or tongue 13, presented by the lower horizontal member 6. As herein shown, the depth of each recess 12 measured from the adjacent face of the frame is the same as the depth of the rabbet 7, measured from said face.

This description applies to all four corners, as will be evident from a comparison of Figs. 1, 2 and 3. Thus it is apparent that both ends of one member are not alike, but that all of the members are alike in respect to the formation of corresponding ends. This fact results in greater convenience in manufacture, as compared with a frame in which both ends of one member are alike, and two opposite members are alike, but differ from the remaining two opposite members. This effects primarily the setting of the cutters of the machine, and secondarily, the convenience in assembling. After the members have been assembled, they are conveniently secured together in the usual manner, as by corner pins 14.

Having thus described one embodiment of the invention, but without limiting myself thereto, what I claim and desire by Letters Patent to secure is:

1. In a frame, the combination of four members constituting the four sides of the frame, all four members being alike in respect to the formation of corresponding, non-adjacent ends, said members being jointed together at all four corners by like joints, each member being provided at each end with two tenons whose ends are perpendicular to the longitudinal edges of such member on which they are formed, said tenons being separated from each other by an internal mortise, and there being at each end an external recess presenting a shoulder perpendicular to said edges, the ends of each member differing from each other in that said external recesses are on opposite sides, respectively, of such member.

2. In a frame, the combination of four members constituting the four sides of the frame, all four members being alike in respect to the formation of corresponding, non-adjacent ends, said members being jointed together at all four

corners by like joints, each member being provided at each end with two tenons whose ends are perpendicular to the longitudinal edges of such member on which they are formed, said tenons being separated from each other by an internal mortise, and there being at each end an external recess presenting a shoulder perpendicular to said edges, the ends of each member differing from each other in that said external recesses are on opposite sides, respectively, of said member, each member being provided with a rabbet along its inner edge on one face of the frame, said rabbet being the same depth as said external recess measured from said face.

3. In a frame, the combination of four members constituting the four sides of the frame, all four members being alike in respect to the formation of corresponding, non-adjacent ends, the ends of each member differing from each other, said members being jointed together at all four corners by like joints, each member being provided at each end with two tenons whose ends are perpendicular to the longitudinal edges of such member on which they are formed, said tenons being separated from each other by an internal mortise, and there being an external recess presenting a shoulder perpendicular to said edges, each member being provided with a rabbet along its inner edge on one face of the frame, said rabbet being the same depth as said external recess measured from said face, said rabbet communicating with the external recess at one end and with the internal mortise at the other end, the tenon adjacent said face and adjacent such other end being narrower than the adjacent tenon at such other end by the width of said rabbet.

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